ANNALS OF EPIDEMIOLOGY

VOLUME 10

EDITORIAL

1 **On the Spatial Pattern of Casualties in Earthquakes**
David Alexander, PhD

ORIGINAL REPORTS

5 **GIS Mapping of Earthquake-Related Deaths and Hospital Admissions from the 1994 Northridge, California, Earthquake**
Corinne Peek-Asa, PhD, Marizen R. Ramirez, MPH, Kim Shoaf, DrPH, Hope Seligson, MS, and Jess F. Kraus, PhD

14 **The Epidemiology of Ovarian Cancer: A Population-Based Study in Olmsted County, Minnesota, 1935–1991**
C. Mary Beard, RN, MPH, Lynn C. Hartmann, MD, Elizabeth J. Atkinson, MS, Peter C. O'Brien, PhD, George D. Malkasian, MD, Gary L. Keeney, MD, and L. Joseph Melton, III, MD

24 **Primary Malignancies of the Thyroid: Epidemiologic Analysis of the Florida Cancer Data System Registry**
Zuber D. Mulla, MSPH, and Curtis E. Margo, MD, MPH

REVIEW

31 **Breast Cancer and Electromagnetic Fields—A Review**
Lee S. Caplan, MD, MPH, PhD, Elinor R. Schoenfeld, PhD, Erin S. O'Leary, PhD, and M. Cristina Leske, MD, MPH

ORIGINAL REPORT

45 **Stress Management Intervention for Primary Prevention of Hypertension: Detailed Results from Phase I of Trials of Hypertension Prevention (TOHP-I)**
David M. Batey, PhD, MPH, Peter G. Kaufmann, PhD, James M. Raczynski, PhD, Jack F. Hollis, PhD, Joseph K. Murphy, PhD, Bernard Rosner, PhD, Sheila A. Corrigan, PhD, Neil B. Rappaport, PhD, Ellie M. Danielson, MIA, Norman L. Lasser, MD, PhD, and Cynthia M. Kuhn, PhD, for the Phase I Trials of Hypertension Prevention (TOHP-I) Collaborative Research Group

STUDY METHODS & DESIGN

59 **Alternative Strategies for Selecting Population Controls: Comparison of Random Digit Dialing and Targeted Telephone Calls**
Ellen Funkhouser, DrPH, Maurizio Macaluso, MD, DrPH, and Xingqiu Wang, MD, MPH

LETTERS TO THE EDITOR

68 **The New Population Standard for Age-Adjusting Death Rates**
Robert N. Anderson, PhD, Paul D. Sorlie, PhD, Harry M. Rosenberg, PhD, Thomas J. Thom, BA, Teri Manolio, MD, and Gregory L. Burke, MD

Response

69 Lewis H. Kuller, MD, DrPH

(*continued*)

© 2000 Elsevier Science Inc. All rights reserved.
655 Avenue of the Americas, New York, NY 10010

1047-2797/00/$–see front matter

EDITORIAL

71 **The Disease Profile of Texas Prison Inmates**
John M. Robertson, MD, MPH

ORIGINAL REPORTS

74 **The Disease Profile of Texas Prison Inmates**
Jacques Baillargeon, PhD, Sandra A. Black, PhD, John Pulvino, PA, and Kim Dunn, MD, PhD

81 **Application of Computer Tomography-Oriented Criteria for Stroke Subtype Classification in a Prospective Study**
Hiroyasu Iso, MD, Kathryn Rexrode, MD, Charles H. Hennekens, MD, and Joann E. Manson, MD

88 **Measuring the Projected Public Health Impact of Lung Cancer Through Lifetime and Age-Conditional Risk Estimates**
Ray M. Merrill, PhD, MPH

97 **Endometrial Cancer in Olmsted County, MN: Trends in Incidence, Risk Factors and Survival**
C. Mary Beard, RN, MPH, Lynn C. Hartmann, MD, Gary L. Keeney, MD, Cynthia S. Crowson, BS, George D. Malkasian, MD, Peter C. O'Brien, PhD, and L. Joseph Melton, III, MD

106 **Serum Vitamins, Carotenoids, and Angina Pectoris: Findings from the National Health and Nutrition Examination Survey III**
Earl S. Ford, MD, MPH, and Wayne H. Giles, MD, MS

117 **Effects on Subject Response of Information Brochures and Small Cash Incentives in a Mail-Based Case-Control Study**
Robert Parkes, MSc, Nancy Kreiger, MPH, PhD, Bonnie James, MSc, and Kenneth C. Johnson, PhD

STUDY METHODS & DESIGN

125 **Design of Physicians' Health Study II—A Randomized Trial of Beta-Carotene, Vitamins E and C, and Multivitamins, in Prevention of Cancer, Cardiovascular Disease, and Eye Disease, and Review of Results of Completed Trials**
William G. Christen, ScD, J. Michael Gaziano, MD, and Charles H. Hennekens, MD, for the Steering Committee of Physicians' Health Study II

EDITORIAL

135 **An Editorial Change**
Richard Rothenberg, MD, MPH

ORIGINAL REPORTS

136 **Serum Uric Acid and Risk of Coronary Heart Disease: Atherosclerosis Risk in Communities (ARIC) Study**
Joseph T. Moriarity, MD, Aaron R. Folsom, MD, Carlos Iribarren, MD, PhD, F. Javier Nieto, MD, PhD, and Wayne D. Rosamond, PhD

144 **A Case Control Study of Multiple Myeloma at Four Nuclear Facilities**
Steve Wing, PhD, David Richardson, PhD, Susanne Wolf, MPH, Gary Mihlan, PhD, Doug Crawford-Brown, PhD, and Joy Wood, MS

154 **The Increasing Marginal Benefit of Condom Usage**
Harrell W. Chesson, PhD, and Thomas L. Gift, PhD

160 **Immunization Coverage among Predominantly Hispanic Children, Aged 2–3 Years, in Central Los Angeles**
Magda A. Shaheen, MD, MPH, Ralph R. Frerichs, DVM, DrPH, Nicole Alexopoulos, MPH, and Jeanette J. Rainey, MPH

169 **Development and Validation of a Calcium Intake Questionnaire for Postmenopausal Women in China**
Liangzhi Xu, BMed, Jenny E. Porteous, MBBS, PhD, Michael R. Phillips, MD, MPH, and Suping Zheng, BMed, MS

ACE Student Prize Paper, 1998

176 **A Study of Smoking, p53 Tumor Suppressor Gene Alterations and Non-Small Cell Lung Cancer**
Martin C. Tammemagi, DVM, PhD, John R. McLaughlin, PhD, J. Brendan M. Mullen, MD, Shelley B. Bull, PhD, Michael R. Johnston, MD, Ming-Sound Tsao, MD, and Alan G. Casson, MD

REVIEW

186 **Preventable Risk Factors for Nasal Cancer**
Lee S. Caplan, MD, PhD, H. Irene Hall, PhD, Robert S. Levine, MD, and Kangmin Zhu, PhD

BRIEF COMMUNICATION

192 **A Comparison of Melanoma Mortality among WWII Veterans of the Pacific and European Theaters**
William F. Page, PhD, David Whiteman, MB, PhD, and Michael Murphy, MB, BChir, MA, MSc, FFPHM

EDITORIAL

197 **Using Administrative Data to Identify Associations between Implanted Medical Devices and Chronic Diseases**
Patrick S. Romano, MD, MPH

COMMENTARY

200 **An Introduction to Epidemiological Research with Medical Databases**
John A. Baron, MD, and Elisabete Weiderpass, MD

ORIGINAL REPORTS

205 **A Retrospective Cohort Study of Implanted Medical Devices and Selected Chronic Diseases in Medicare Claims Data**
Sander Greenland, MS, DrPH, and William D. Finkle, MS, PhD

214 **Race, Socioeconomic Status, and Cause-Specific Mortality**
George Howard, DrPH, Roger T. Anderson, PhD, Gregory Russell, MS, Virginia J. Howard, MSPH, and Gregory L. Burke, MD

224 **Marital Status and Mortality: The National Longitudinal Mortality Study**
Norman J. Johnson, PhD, Eric Backlund, MS, Paul D. Sorlie, PhD, and Catherine A. Loveless, MS

239 **The Family Risk Score for Coronary Heart Disease: Associations with Lipids, Lipoproteins, and Body Habitus in a Middle-Aged Bi-Racial Cohort: The ARIC Study**
Mark A. Pereira, PhD, Pamela J. Schreiner, PhD, James S. Pankow, PhD, Roger R. Williams, MD, Millicent Higgins, MD, Michael A. Province, PhD, and D.C. Rao, PhD

246 **The Effect of Alcohol Abuse on the Risk of NSAID-Related Gastrointestinal Events**
C. Ineke Neutel, PhD, FACE, and W. Curt Appel, PhD

STUDY METHODS & DESIGN

251 **Validity and Coverage of Estimates of Relative Accuracy**
Hong Cheng, MD, Maurizio Macaluso, MD, and J. Michael Hardin, PhD

WEB SITE REVIEW

261 **Clinician's Guide to the Choice of Instruments for Quality of Life Assessment (http://www.qlmed.org)**
Trudi V. Horton, PhD

ORIGINAL REPORTS

263 **Abdominal Adiposity and Clustering of Multiple Metabolic Syndrome in White, Black and Hispanic Americans**
Ike S. Okosun, MPH, PhD, Youlian Liao, MD, Charles N. Rotimi, PhD, T. Elaine Prewitt, DrPH, and Richard S. Cooper, MD

271 **Reproducibility of Resting Blood Pressure and Heart Rate Measurements: The HERITAGE Family Study**
Philip R. Stanforth, MS, Jacques Gagnon, PhD, Treva Rice, PhD, Claude Bouchard, PhD, Arthur S. Leon, MD, D. C. Rao, PhD, James S. Skinner, PhD, and Jack H. Wilmore, PhD

278 **Ten-Year Follow-Up for Male Twins Divided into High- or Low-Risk Groups for Ischemic Heart Disease Based on Risk Factors Measured 25 Years Previously**
Terry Reed, PhD, Dorit Carmelli, PhD, Gary E. Swan, PhD, Philip A. Wolf, MD, Bruce L. Mlller, MD, Ruth Krasnow, BA, and W. McFate Smith, MD

285 **A Comparison of Cervical Pathology between United States Air Force Women Who Did and Did Not Serve in the Persian Gulf War**
R. Allen Frommelt, MS, Michael R. Peterson, DVM, DrPH, and Timothy J. O'Leary, MD, PhD

293 **Epidemiology of Erectile Dysfunction: A Community-based Study in Rural New York State**
K. Steven Ansong, MD, MPH, Carol Lewis, MPH, ScD, Paul Jenkins, PhD, and Joseph Bell, MD

297 **Neighborhood Poverty as a Predictor of Intimate Partner Violence Among White, Black, and Hispanic Couples in the United States: A Multilevel Analysis**
Carol B. Cunradi, PhD, MPH, Raul Caetano, MD, PhD, Catherine Clark, PhD, and John Schafer, PhD

309 **Segregation Analysis of Drinking Problem in Elderly Men and Their First-Degree Relatives from the Western Collaborative Group Study**
Li Shu-Chuan Cheng, PhD, Dorit Carmelli, PhD, Gary E. Swan, PhD, and Adolf Pfefferbaum, MD

316 **Puberty-associated Differences in Total Cholesterol and Triglyceride Levels According to Sex in French Children Aged 10–13 Years**
Sandrine Bertrais, DEA, Beverley Balkau, PhD, M. Aline Charles, MD, Sylviane Vol, MSc, Cécile Calvet, MD, Jean Tichet, MD, and Eveline Eschwege, MD

324 **Differences in Echocardiographic Findings and Systemic Hemodynamics among Non-Diabetic American Indians in Different Regions: The Strong Heart Study**
Richard B. Devereux, MD, Mary J. Roman, MD, Michael J. O'Grady, BA, Richard R. Fabsitz, MA, Everett R. Rhoades, MD, Alan Crawford, Barbara V. Howard, PhD, Elisa T. Lee, PhD, and Thomas K. Welty, MD, MPH, for the Strong Heart Study Investigators

333 **A Fifty Year Mortality Follow-up Study of Veterans Exposed to Low Level Chemical Warfare Agent, Mustard Gas**
Tim Bullman, MA, and Han Kang, DrPH

ORIGINAL REPORTS

339 **The Female Condom and STDs: Design of a Community Intervention Trial**
Paul J. Feldblum, PhD, Job J. Bwayo, MD, Maureen Kuyoh, MA, Michael Welsh, PhD, Kelley A. Ryan, BA, and Mario Chen-Mok, PhD

347 **A Prospective Study of Alcohol Consumption and Cataract Extraction among U.S. Women**
Lisa Chasan-Taber, ScD, Walter C. Willett, MD, Johanna M. Seddon, MD, Meir J. Stampfer, MD, Bernard Rosner, PhD, Graham A. Colditz, MD, Frank E. Speizer, MD, and Susan E. Hankinson, ScD

354 **Validity of Nutrient Estimates by Food Frequency Questionnaires Based Either on Exact Frequencies or Categories**
Meera Jain, PhD, and John McLaughlin, PhD

361 **Lifestyle and Anthropometric Risk Factors for Prostate Cancer in a Cohort of Iowa Men**
Shannon D. Putnam, MS, James R. Cerhan, MD, PhD, Alexander S. Parker, MS, Gregory D. Bianchi, MD, Robert B. Wallace, MD, Kenneth P. Cantor, PhD, and Charles F. Lynch, MD, PhD

370 **Metropolitan and Non-Metropolitan Trends in Coronary Heart Disease Mortality within Appalachia, 1980–1997**
Elizabeth Barnett, PhD, Joel A. Halverson, MA, Gregory A. Elmes, PhD, and Valerie E. Braham, MA

380 **Stroke Risk from Multiple Risk Factors Combined with Hypertension: A Primary Care Based Case-control Study in a Defined Population of Northwest England**
Xianglin Du, MD, PhD, Rosanne McNamee, PhD, and Kennedy Cruikshank, MD, FRCP

389 **NHLBI Family Blood Pressure Program: Methodology and Recruitment in the HyperGEN Network**
Roger R. Williams, MD, D. C. Rao, PhD, R. Curtis Ellison, MD, Donna K. Arnett, PhD, Gerardo Heiss, MD, PhD, Albert Oberman, MD, John H. Eckfeldt, PhD, Mark F. Leppert, PhD, Michael A. Province, PhD, Stephen C. Mockrin, PhD, and Steven C. Hunt, PhD, for the HyperGEN Investigators

401 **Relation between Green Tea Consumption and the Severity of Coronary Atherosclerosis among Japanese Men and Women**
Shizuka Sasazuki, MD, Hiroko Kodama, MS, Kouichi Yoshimasu, MD, Ying Liu, MD, Masakazu Washio, MD, Keitaro Tanaka, MD, Shoji Tokunaga, PhD, Suminori Kono, MD, Hidekazu Arai, MD, Yoshitaka Doi, MD, Tomoki Kawano, MD, Osamu Nakagaki, MD, Kazuyuki Takada, MD, Samon Koyanagi, MD, Koji Hiyamuta, MD, Takanobu Nii, MD, Kazuyuki Shirai, MD, Munehito Ideishi, MD, Kikuo Arakawa, MD, Masahiro Mohri, MD, and Akira Takeshita, MD

ORIGINAL REPORTS

409 **Is Smoking Associated with the Risk of Developing Alzheimer's Disease? Results from Three Canadian Data Sets**
Suzanne L. Tyas, PhD, Linda L. Pederson, PhD, and John J. Koval, PhD

417 **Differences and Trends in Antioxidant Dietary Intake in Smokers and Non-smokers, 1980–1992: The Minnesota Heart Survey**
Elizabeth L.R. Phillips, MPH, Donna K. Arnett, PhD, John H. Himes, PhD, Paul G. McGovern, PhD, Henry Blackburn, MD, and Russell V. Luepker, MD

424 **A Comparison between BMI and Conicity Index on Predicting Coronary Heart Disease: The Framingham Heart Study**
Kyung S. Kim, PhD, Willis L. Owen, PhD, Deborah Williams, MD, and Lucile L. Adams-Campbell, PhD

432 **Recruiting Participants for Community-Based Research: The Diabetic Retinopathy Awareness Program**
Elinor R. Schoenfeld, PhD, Judith M. Greene, MPH, Suh-Yuh Wu, MA, Erin O'Leary, MA, Francine Forte, and M. Cristina Leske, MD, MPH

441 **Serum Ferritin and Death from all Causes and Cardiovascular Disease: The NHANES II Mortality Study**
Christopher T. Sempos, PhD, Anne C. Looker, PhD, Richard F. Gillum, MD, Daniel L. McGee, PhD, Cuong V. Vuong, BS, and Clifford L. Johnson, MSPH

ABSTRACTS

449 **American College of Epidemiology Annual Meeting**
September 25–26, 2000
Atlanta, Georgia

EXECUTIVE SUMMARY

S1 **Participation of Minorities and Women in Clinical Cancer Research**
Sandra Millon Underwood, PhD, RN, FAAN, and George A. Alexander, MD

ORIGINAL REPORTS

S3 **Minorities, Women, and Clinical Cancer Research: The Charge, Promise, and Challenge**
Sandra Millon Underwood, PhD, RN, FAAN

S13 **Recruitment and Retention of Minority Women in Cancer Screening, Prevention, and Treatment Trials**
Diane R. Brown, PhD, Mona N. Fouad, MD, MPH, Karen Basen-Engquist, PhD, and Guillermo Tortolero-Luna, MD, PhD

S22 **Participation of Minorities in Cancer Research: The Influence of Structural, Cultural, and Linguistic Factors**
Anna R. Giuliano, PhD, Noreen Mokuau, DSW, Claire Hughes, DrPH, Guillermo Tortolero-Luna, MD, PhD, Betsy Risendal, PhD, Reginald C.S. Ho, MD, Theresa Elaine Prewitt, DrPH, and Worta J. McCaskill-Stevens, MD

S35 **Minority Recruitment in Clinical Trials: A Conference at Tuskegee, Researchers and the Community**
Mona N. Fouad, MD, MPH, Edward Partridge, MD, B. Lee Green, PhD, Connie Kohler, PhD, Theresa Wynn, PhD, Steve Nagy, PhD, and Suzanne Churchill, MPA

S41 **Recruitment of American Indians and Alaska Natives into Clinical Trials**
Felicia Schanche Hodge, DrPH, Sheila Weinmann, PhD, and Yvette Roubideaux, MD, MPH

S49 **Cancer Research Studies in Native Hawaiians and Pacific Islanders**
Claire Ku'uleilani Hughes, DrPH, Joann Umilani Tsark, MPH, Cynthia K. Kenui, and George A. Alexander, MD

S61 **Representation of Asian Americans in Clinical Cancer Trials**
George A. Alexander, MD, Kenneth C. Chu, PhD, and Reginald C.S. Ho, MD

S68 **Recruitment Experience in the First Phase of the African American Hereditary Prostate Cancer (AAHPC) Study**
Charmaine D. Royal, PhD, Agnes Baffoe-Bonnie, MD, PhD, Rick Kittles, PhD, Isaac Powell, MD, James Bennett, MD, Gerald Hoke, MD, Curtis Pettaway, MD, Sally Weinrich, PhD, Srinivasan Vijayakumar, MD, Chiledum Ahaghotu, MD, Terry Mason, MD, Edna Johnson, RNC, MSN, Michael Obeikwe, MD, Cheryl Simpson, Raul Mejia, MD, William Boykin, MD, Pamela Roberson, Jacqueline Frost, Louise Faison-Smith, Carol Meegan, Norma Foster, RNC, MSN, Paulette Furbert-Harris, PhD, John Carpten, PhD, Joan Bailey-Wilson, PhD, Jeffrey Trent, PhD, Kate Berg, PhD, Georgia Dunston, PhD, and Francis Collins, MD, PhD

S78 **Physician Perspectives on Increasing Minorities in Cancer Clinical Trials: An Eastern Cooperative Oncology Group (ECOG) Initiative**
Harlan A. Pinto, MD, Worta McCaskill-Stevens, MD, Pam Wolfe, PhD, and Alfred C. Marcus, PhD

S85 **Minority Recruitement in the Prostate Cancer Prevention Trial**
Carol McMillan Moinpour, PhD, Jonnae O. Atkinson, MS, Sarah Moody Thomas, PhD, Sandra Millon Underwood, PhD, RN, FAAN, Carolyn Harvey, PhD, Jeanne Parzuchowski, RN, OCN, MN, Laura C. Lovato, MS, Anne M. Ryan, RN, M. Shannon Hill, BM, Edward DeAntoni, PhD, Ellen R. Gritz, PhD, Ian M. Thompson, Jr., MD, and Charles A. Coltman, Jr., MD

S92 **Improving the Validity and Generalizability of Studies with Underserved U.S. Populations Expanding the Research Paradigm**
Marjorie Kagawa-Singer, PhD, RN, MN

S104 **Minorities, Women, Clinical Cancer Research: Resource Guide**
Sandra Millon Underwood, PhD, RN, FAAN

S110 **Acknowledgment**

EDITORIAL

485 **American College of Epidemiology Ethics Guidelines: Filling a Critical Gap in the Profession**
Robert E. McKeown, PhD

487 **American College of Epidemiology Ethics Guidelines**

ORIGINAL REPORTS

498 **Reliability of Chalmers' Scale to Assess Quality in Meta-Analyses on Pharmacological Treatments for Osteoporosis**
Anick Bérard, PhD, Nathalie Andreu, MD, MSc, Jean-Pierre Tétrault, MD, MSc, Théophile Niyonsenga, PhD, and Daniel Myhal, MD

504 **Electronic Telephone Directory Listings: Preferred Sampling Frame for a Population-Based Study of Childhood Cancer in Australia**
Patricia Casarolli Valery, MD, MPH, Gail Williams, BSc, PhD, MSc, William McWhirter, MB, ChB, MD, MA, Adrian Sleigh, MD, MPH, FRACP, Debbie Scott, RN, MPH, and Chris Bain, MBBS, MPH, MS

509 **Urinary Tract Infection: Self-Reported Incidence and Associated Costs**
Betsy Foxman, PhD, Robin Barlow, PhD, Hannah D'Arcy, MS, Brenda Gillespie, PhD, and Jack D. Sobel, MD

516 **The Perinatal Advantage of Mexican-Origin Latina Women**
Nancy A. Hessol, MSPH, and Elena Fuentes-Afflick, MD, MPH

524 **Effects of the ApoE Polymorphism on Plasma Lipoproteins in Mexican Americans**
Wen-Chi Hsueh, PhD, Braxton D. Mitchell, PhD, James E. Hixson, PhD, and David L. Rainwater, PhD

532 **The Differential Effect of Education and Occupation on Body Mass and Overweight in a Sample of Working People of the General Population**
Bruna Galobardes, MD, MPH, Alfredo Morabia, MD, PhD, and Martine S. Bernstein, MD

538 **Short-term Storage of Blood Samples and DNA Isolation in Serum Separator Tubes for Application in Epidemiological Studies and Clinical Research**
Holger J. Schünemann, MD, PhD, Martin Stanulla, MD, Maurizio Trevisan, MD, Peter D. Aplan, MD, Jo L. Freudenheim, PhD, and Paola Muti, MD

545 **Acknowledgment to 2000 Reviewers**

546 **Author Index to Volume 10**

553 **Subject Index to Volume 10**

Volume 10 Contents